

REMARKS/ARGUMENTS

The office action of November 2, 2004 has been carefully reviewed and these remarks are responsive thereto. Reconsideration and allowance of the instant application are respectfully requested. Claims 1-27 remain in this application. New claim 28 has been added.

Applicants have amended the specification to describe each element depicted in Figure 3 and to correct other minor informalities. Applicants have corrected a minor informality to Fig. 10. The labels "Y" and "N" from decision block 1013 were omitted and have been added in the replacement drawing. No new matter has been added.

Claims 1, 6-8, 12, 16, 19 and 23 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent no. 5,091,964 to Shimomura.

Claims 13 and 15 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. patent no. 6,397,233 to Okawa et al. ("Okawa").

The claims stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the following combinations:

- claims 2-3, 9-11, 24 and 26 over Shimomura as applied to claims 1, 6-8, 12, 16-19 and 23 above, and further in view of U.S. patent no. 5,867,593 to Fukuda et al. ("Fukuda").
- claims 4-5 over Shimomura as applied to claims 1, 6-8, 12, 16, 19 and 23 above, Fukuda as applied to claims 2-3, 9-11, 24 and 26 above, and further in view of U.S. patent no. 6,326,970 to Mott et al. ("Mott").
- claims 17-18 and 25 over Shimomura as applied to claims 1, 6-8, 12, 16, 19 and 23 above, and further in view of Mott.
- claim 14 over Okawa, and further in view of Fukuda.
- claims 20-22 and 27 over Shimomura as applied to claims 1, 6-8, 12, 16, 19 and 23 above, and further in view of U.S. patent no. 6,075,532 to Colleran et al. ("Colleran").

Applicants respectfully traverse these rejections.

Claims 1-12 and 16-27

Independent claim 1 is directed to a method for editing an electronic document containing drawings and recites, among other features, dividing the document into a plurality of regions, each region having a reference axis, and wherein positions of the drawings are identified with respect to the axes; receiving a request to modify a line size of the document; and rescaling the drawings in accordance with the modification in line size and the axes. The action alleges that Shimomura discloses all the elements of claim 1. To show the steps of receiving the request to modify and rescaling the drawings, the action points to col. 2, lines 12-31 of Shimomura. Specifically, the action states on page 3 that:

Shimomura discloses reduction means for reducing or scaling down each of the plurality of image regions divided by the dividing means (col. 2, lines 12-31), thus, receiving a request to modify is an inherent feature of computer processing.

On the contrary, “receiving a request to modify” is not an inherent feature of the Shimomura system. For a feature to be inherent it necessarily must be the result or occur; mere possibilities are insufficient. MPEP § 2112. The primary object of Shimomura involves “detecting more precisely the existence of a blank portion or an unfilled pixel region as a boundary between adjacent text images.” Col. 1, lines 42-45. This in effect allows the text portion of a document to be extracted by identifying the blank portions.

Shimomura describes the process of extracting a text region in Fig. 2 and the accompanying description. First, in step S1, the peripheral distribution of a document image is determined by measuring the number of filled pixels on each line of a scanned version of the document image and mapping the results on an X-axis or Y-axis. Col. 4, lines 12-29. Next at step S2, the dividing lines are determined by various processing to determine bottoms (e.g., T_{x1} to T_{x8}) for the X-axis peripheral distribution and bottoms (e.g., T_{y1} to T_{y6}) for the Y-axis peripheral distribution. Col. 5, lines 45-49. Then, vertical and horizontal dividing lines (L_{v1} to L_{v8} and L_{h1} to L_{h6}) are defined at the positions where the bottoms are located as shown in Fig. 3, for example. Col. 5, lines 50-55. In step S3, the image is divided into blocks by the dividing lines defined at step S2. For example, the document image shown in Fig. 5A is divided by the dividing

lines L_{V1} to L_{V8} and L_{H1} to L_{H6}). Col. 5, lines 57-65. As described at col. 5, line 66 to col. 6, line 52,

With respect to each block . . . the sizes of the blocks are reduced at step S3, so that a circumscribed rectangular frame containing characters in the block is reduced. FIG. 5B shows an example of the processing of reducing a size of a block to reduce the circumscribed rectangular frame. In a block S31, there exists a blank space between the dividing lines L_{V3} , L_{V4} and L_{H2} surrounding characters w and the characters w inside the circumscribed rectangular frame formed by these dividing lines. At step S3, a new circumscribed rectangular frame is formed by moving or setting back these dividing lines as shown by arrows until they reach or contact pixels which outline the characters w contained in the block, so that a newly circumscribed rectangular frame is formed as shown by solid lines in FIG. 5B. When the block contains no image or no filled pixel, the block is deleted. The same processing of forming a new circumscribed rectangular frame is applied to each of the blocks to redefine a block by reducing its size. In this embodiment of the present invention shown in FIG. 5A, there is no block deleted, so that there is no change in the number of blocks before and after redefining blocks. A layout of blocks obtained by redefining the blocks shown in FIG. 5A is shown in FIG. 6.

(Emphasis added). As is apparent from the above passage and Figs. 5A, 5B and 6, the actual characters are not being reduced; nor is the drawing itself. Instead, the blank space in the block is being deleted, thereby reducing the size of the block with the characters maintaining their size. Next, the system processes adjacent extracted sub-regions in step S4 and finally in step S5, the system process extracted text regions. Step S3 provides the framework for reducing the size of the block to a minimum size such that the text region can be extracted for further processing in step S5. Hence, reducing or scaling down each of the plurality of image regions is more accurately referred to as a request to extract a text region and does not necessarily, if at all, amount to a request to modify a line size of the document as called for in claim 1 or even modify the document at all. Necessarily, Shimomura does not rescale drawings in accordance with the modification in line size and the axes as recited in claim 1.

For at least the above reasons, independent claim 1 is patentably distinct from Shimomura. Independent claim 23 is similar to claim 1 in some of the distinguishing respects

noted above, and for at least those reasons is patentable over Shimomura. Claim 16 calls for, among other features, responsive to a change in a line size of the document, rescaling each of the drawings in accordance with a proportion of the change in the line size, and the distance to the one of the reference axes. As ostensibly described with respect to claim 1, Shimomura lacks a teaching or suggestion of at least this feature of claim 16.

Claim 20 is directed to a method for editing an electronic document containing drawings and calls for the steps of determining a bounding box for a new drawing to be added to the document; identifying an anchor point for the new drawing; dividing the document into a plurality of adjacent regions, each region having a reference axis; and storing an offset value representing a distance between the new drawing and one of the reference axes. The action alleges that Shimomura shows the step of dividing, but acknowledges that Shimomura fails to provide a teaching or suggestion of determining a bounding box, identifying an anchor point, and storing an offset value. In an attempt to remedy these defects, the action relies on Fig. 4, and col. 8, line 46 to col. 9, line 52 of Colleran. The action at page 11 alleges that it would have been obvious to combine Shimomura with Colleran, because “Colleran’s system improves the efficiency of redrawing animated characters on a desktop.” Notwithstanding whether the combination would have resulted in the claim 20 invention, contrary to the action’s assertion, one skilled in the art would not have modified Shimomura with Colleran. Notably, Shimomura is directed to extracting a text region of a document and performs the step of dividing documents into a plurality of adjacent regions during this process. As such, the skilled artisan with Shimomura in hand could care less whether Colleran’s system improves the efficiency of redrawing animated characters on a desktop as that is wholly unrelated to Shimomura’s primary objective of “detecting more precisely the existence of a blank portion or an unfilled pixel region as a boundary between adjacent text images.” Col. 1, lines 42-45. Meeting this objective assists Shimomura in extracting text regions. Thus, one skilled in the art would not have been motivated to combine Shimomura and Colleran to obtain the claim 23 invention. For at least this reason, claim 23 is considered patentable over the applied art.

Even assuming, but not admitting, that Shimomura may be combined with the other applied references, none of the references, namely Fukuda, Mott, and Colleran, overcomes the

aforementioned deficiencies noted above with respect to Shimomura. As such, claims 2-12, which ultimately depend from claim 1, claims 17-19, which ultimately depend from claim 16, claims 21 and 22, which ultimately depend from claim 20, and claims 24-27, which ultimately depend from claim 23 are patentably distinct from the applied for the same reasons as their ultimate base claim and further in view of the advantageous features recited therein..

Claims 13-15

Independent claim 13 is directed to a method for editing an electronic document containing text and drawings. The claim 13 method calls for, among other features, receiving a request to modify a line height of the text, rescaling the text in proportion to the modified line height, and rescaling the drawings responsive to the request to modify the line height. The action alleges that Okawa, in the Abstract, col. 6, lines 28-63, col. 8, lines 22-41 and Figs. 5A and 5B, discloses all the elements of claim 13. Applicants respectfully disagree.

Okawa relates to a system in which permits a user to add document elements (e.g., character, symbol, space, word, or graphics) to an already created document. See Okawa, col. 2, lines 13-20. Okawa describes four variants shown in Figs. 3A and 3B, Figs. 4A and 4B, Figs. 5A and 5B, and Figs. 6A and 6B, respectively. According to the implementation in Figs. 3A and 3B, a document region defined with a pointing device expands so that a document element can be added within the expanded document region. Col. 7, lines 50-55. According to the implementation in Figs. 4A and 4B, when a document region acquisition request is detected, the document region defined by the pointing device expands to become a new prescribed region in which document elements can be added in, and the data size or data interval of the document element (“harsh”) in the document region subject to the change is reduced to match the change. Col. 7, line 56 to col. 8, line 7. According to the implementation in Figs. 5A and 5B, when a document region exclusive acquisition request is detected, the document region defined by the pointing device is set to have no document elements therein such that document elements excluded by the document region are moved and the data size or data interval of the excluded document elements are adjusted to match the change (i.e., reduced in size in some capacity as shown in Fig. 5B). Col. 8, lines 8-29. The spread document region defined by the pointing device expands as shown in Fig. 5B so that document elements can be added in. Id. In the

implementation in Figs. 6A and 6B, in response to a document element delete request, the document element in the region defined by the pointing device is deleted, and the remaining document element in the document region is expanded depending on the amount of document element deleted. Id. at lines 30-47. Document elements can be added to the expanded document region. Id. at lines 46-47.

Okawa does not teach or suggest receiving a request to modify a line height of the text as called for in claim 13. Indeed, Okawa is directed to the addition of a document element to a created document. Col. 1, lines 6-19; col. 3, lines 12-17. As described above Okawa merely discloses receiving a document region change request to add space for inserting a document element(s); a document region acquisition request to acquire space for inserting a document element(s); a document region exclusive acquisition request to acquire space for inserting a document element(s); and a document element delete request for add a document element to an expanded remaining document region formed by deleting a document element and expanding the remaining document region to occupy the region of the deleted document element. These requests are all directed to adding document elements to a created document and do not teach or suggest a request to modify a line height of the text as recited in claim 13. For at least this reason, claims 13 and 15 are patentably distinct from Okawa.

Claim 14, which depends from claim 13, was rejected over the combination of Okawa and Fukuda. Fukuda fails to overcome the deficiencies noted with respect to Okawa and is thus patentably distinguishable from the combination of Okawa and Fukuda for at least this reason.

Also, claim 14 calls for, among other features, determining whether the rescaled drawings overlap one another, and if the rescaled drawings are determined to overlap one another, repositioning one or more of the drawings to avoid the overlap. The action acknowledges that Okawa fails to teach or suggest the determining and repositioning steps called for in claim 14. To overcome this deficiency, the action relies on Fukuda. Even assuming, but not admitting, that Fukuda discloses the determining and repositioning steps of claim 14 and Okawa discloses the remaining features of claim 14, one skilled in the art would not have modified Okawa with Fukuda in the manner suggested in the action. Apparently, to provide motivation for this combination, the action alleges that by repositioning or re-dividing regions as

taught by Fukuda, the overlapping problem would not exist and the image region dividing system would be enhanced. Notably, nowhere does Okawa suggest that images or drawings would ever overlap according to the process of adding a document element to a created document. Indeed, based on the process described in Okawa, there is never a situation in which a document element or drawing would overlap according to any of the implementations described. Hence, one skilled in the art would not have any need to account for overlap and as such to combine Okawa with Fukuda in the manner suggested in the action would be improper. For this further reason, claim 14 is patentably distinct over the applied art.

Also, applicants have added new claim 28, which depends from claim 13 and is fully supported by the specification and recites the further distinguishing feature that the request to modify the line height is a request to increase the line height.

CONCLUSION

A Fee Transmittal is attached. If any additional fees are required or if an overpayment is made, the Commissioner is authorized to debit or credit our Deposit Account No. 19-0733, accordingly.

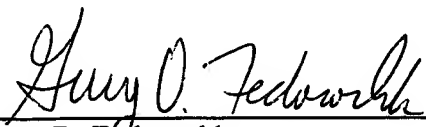
All rejections having been addressed, applicants respectfully submit that the instant application is in condition for allowance, and respectfully solicit prompt notification of the same.

Respectfully submitted,

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Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 10. This sheet, which includes Fig. 10, replaces the original sheet including Fig. 10. In Fig. 10, previously omitted element labels “Y” and “N” adjacent to decision block 1013 have been added.

Attachment: Replacement Sheet
Annotated Sheet Showing Changes

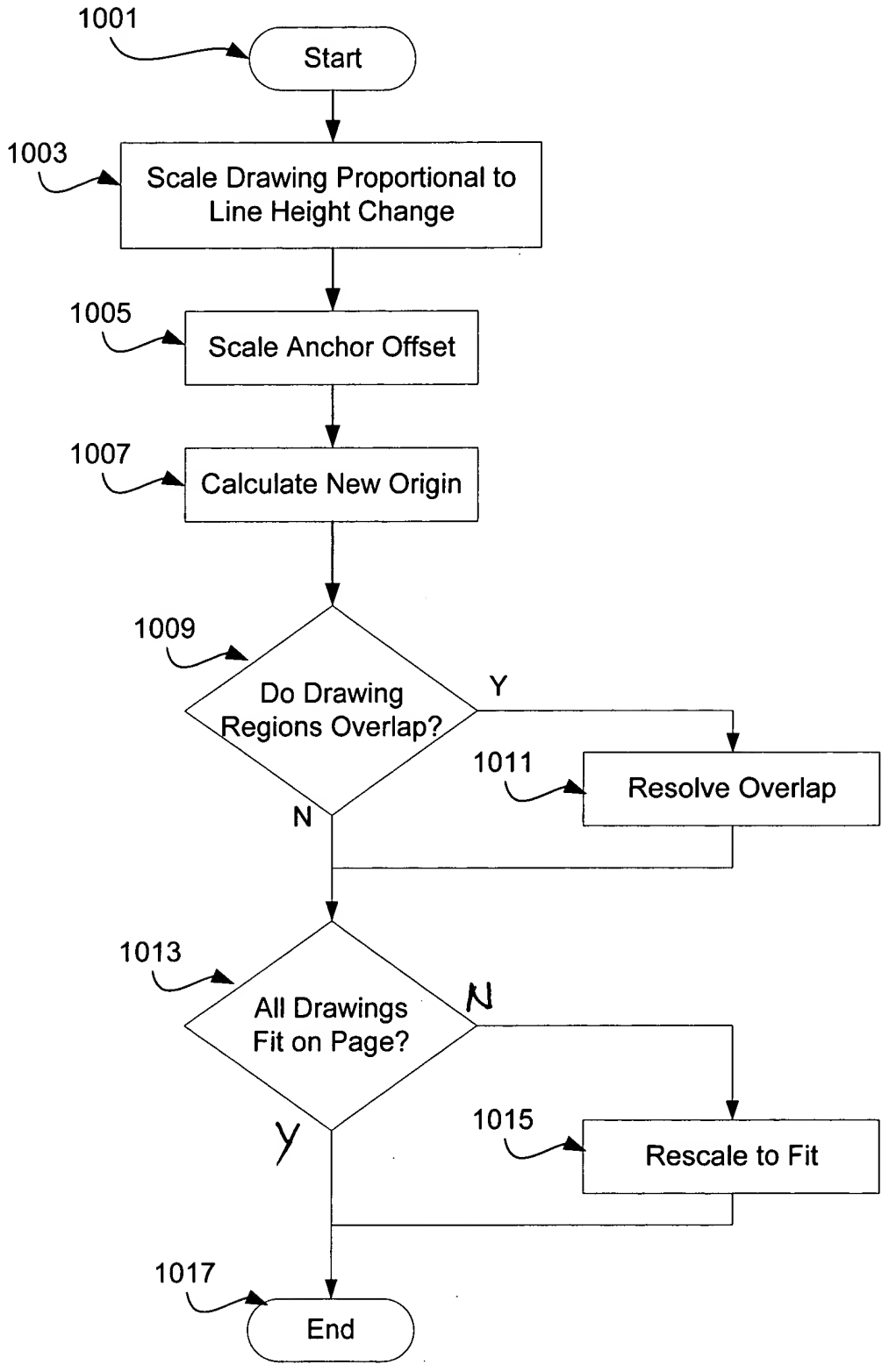
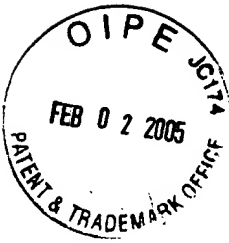


FIG. 10